

We claim:

1. A system for managing a plurality of services in a distributed services network,
comprising:
- 5 a plurality of services provided on a plurality of server devices connected to a
network,
at least one agent process residing on a agent device connected to the network,
at least one registration service residing on a first server connected to the network
to register new subscribers to the distributed services network and to assign agent-
identifications to each registered subscriber,
10 at least one login service residing on a second server connected to the network to
connected existing subscribers to the distributed services network,
at least one connection service residing on a third server connected to the network
to monitor the status of each subscriber connected to the distributed services network,
15 at least one plug-in management service residing on a fourth server connected to
the network to maintain copies of plug-in modules used in the distributed services
network and to distribute a copy of a plug-in module requested by a subscriber, and
at least one subscriber profile database management service residing on a fifth
server connected to the network to store subscriber profile data.
- 20 2. The system for managing a plurality of services in a distributed services network
of claim 1, further comprising a message posting service residing on a message server connected
to the network to transmit messages to all subscribers connected to the distributed services
network.

3. The system for managing a plurality of services in a distributed services network of claim 1, wherein the subscriber profile database management service comprises a subscriber profile database, a profile create service that creates entries in the subscriber profile database, a
5 profile update service that updates entries in the subscriber profile database and a profile query service that searches for entries in the subscriber profile database.

4. The system for managing a plurality of services in a distributed services network of claim 1, wherein the connection service comprises at least one agent connection status service
10 residing on a status server to periodically probe each subscriber that is connected to the distributed services network.

5. The system for managing a plurality of services in a distributed services network of claim 1, further comprising a service point map management service residing on a at least one
15 map manager server to collect location information for each service connected to the distributed services network and to generate a service point map listing of selected services for distribution to subscribers.

6. The system for managing a plurality of services in a distributed services network
20 of claim 5, wherein the service point map management service resides on the second server.

7. The system for managing a plurality of services in a distributed services network of claim 5, wherein the service point map management service uses load balancing techniques to generate the service point map listing.

5 8. The system for managing a plurality of services in a distributed services network of claim 1, wherein the registration service collects profile data from a subscriber and forwards the profile data to the subscriber profile database management service.

10 9. The system for managing a plurality of services in a distributed services network of claim 1, wherein the plug-in management service updates a subscriber connected to the distributed services network with a current plug-in.

10 10. In a network of distributed services, a method of operating an agent machine having a service location map, comprising:

15 retrieving an address for a login service in the network of distributed services from the service location map,
contacting the login service,
requesting access to the network of distributed services by transmitting an agent-identification to the login service,
20 receiving an updated service location map from the login service,
receiving profile data corresponding to the agent-identification,
comparing the profile data to profile information stored at the agent machine to determine if a agent update action is required by the agent machine, and

connecting to a selected service listed in the updated service location map using location information contained in the updated service location map for the selected service.

5 11. The method of operating an agent machine of claim 10, further comprising:
retrieving an address for a registration service in the network of distributed services from the service location map,
contacting the registration service to request access to the network of distributed services,
10 receiving an agent-identification from the registration service,
receiving a current service location map from the registration service, and
connecting to a selected service listed in the current service point map using location information contained in the current service location map for the selected service.

15 12. The method of operating an agent machine of claim 10, further comprising:
retrieving an address for a plug-in management service in the network of distributed services from the service location map,
contacting the plug-in management service to request delivery of a selected plug-
20 in,
receiving the selected plug-in from the plug-in management service, and
installing the selected plug-in on the agent machine.

13. The method of operating an agent machine of claim 10, further comprising:
retrieving an address for a requested service in the network of distributed services
from the service location map,
contacting the requested service at a first server,
5 determining if the agent machine requires an agent plug-in update to access the
requested service.

14. The method of operating a agent machine of claim 13, further comprising:
receiving any required agent plug-in update from the first server,
installing the required agent plug-in update, and
running the selected service.

15. The method of operating a agent machine of claim 13, further comprising:
receiving any required agent plug-in update from a plug-in management service in
the network of distributed services,
installing the required agent plug-in update, and
running the selected service.

16. A method for managing a plurality of services located on a plurality of servers as
20 an extensible service bus, comprising:

providing a registration service where an agent machine can register as a
subscriber with the extensible service bus and receive a subscriber identification,

004040-2092450

Sub
P2

providing a login service where subscribers can connect to the extensible service bus and receive a subscriber identification,

providing a service map management service that receives server location information from each of the plurality of services and generates a service location map comprising a listing of services included on the extensible service bus and server location information corresponding to each service,

providing a connection status service to monitor the connection status of subscribers and servers connected to the extensible service bus.

17. The method for managing services of claim 16, further comprising providing a subscriber profile database service that stores subscriber data that is required for access to the extensible service bus.

18. The method for managing services of claim 16, further comprising transmitting a copy of the service map to each subscriber to the extensible service bus.

19. The method for managing services of claim 16, wherein the step of providing a service map comprises selecting server location information based on server load balancing techniques.

20. The method for managing services of claim 16, further comprising providing a message posting service for sending messages directly to a subscriber connected to the extensible service bus.